

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/812,961	03/31/2004	Kun-Hong Chen	SUND 508	4885	
23995	7590 12/13/2005		EXAM	EXAMINER	
RABIN & Berdo, PC			SARKAR,	SARKAR, ASOK K	
SUITE 500	1101 14TH STREET, NW SUITE 500		ART UNIT	PAPER NUMBER	
WASHINGTON, DC 20005			2891		
			DATE MAILED: 12/13/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Summary	10/812,961	CHEN ET AL.				
Office Action Summary	Examiner	Art Unit				
T. MAIL IVO DATE (41)	Asok K. Sarkar	2891				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be timused apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONEI	l. lely filed the mailing date of this communication. (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 31 M	arch 2004.					
2a) This action is <b>FINAL</b> . 2b) ⊠ This	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.					
•—	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
<ul> <li>4) ⊠ Claim(s) 1-20 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdraw</li> <li>5) ☐ Claim(s) is/are allowed.</li> <li>6) ☐ Claim(s) is/are rejected.</li> <li>7) ☒ Claim(s) 1-20 is/are objected to.</li> <li>8) ☐ Claim(s) are subject to restriction and/or</li> </ul>	vn from consideration.					
Application Papers						
9)☐ The specification is objected to by the Examine 10)☒ The drawing(s) filed on 31 March 2004 is/are: Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11)☐ The oath or declaration is objected to by the Ex	a) $\square$ accepted or b) $\square$ objected to drawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
<ul> <li>12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a)  All b)  Some * c) None of:</li> <li>1.  Certified copies of the priority documents have been received.</li> <li>2.  Certified copies of the priority documents have been received in Application No</li> <li>3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)	4) 🔲 Intonious Surrenos	(PTO 413)				
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> <li>Paper No(s)/Mail Date</li> </ol>	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:					

Application/Control Number: 10/812,961 Page 2

Art Unit: 2891

#### **DETAILED ACTION**

### Claim Objections

1. Claims 1, 3, 5, 9, 10, 11, 13, 15, 19 and 20 are objected to because of the following informalities: In claims 1 and 11, the phrase "blanketly forming" should be changed to "blanket depositing or formed by blanket deposition". In claims 3, 5, 13 and 15, there is no antecedent basis for the "gate oxide". In claims 9, 10, 19 and 20, the symbol "5el5" should be changed to "5el5". Appropriate correction is required.

## Allowable Subject Matter

2. Claims 1-20 are objected for having minor informalities, but would be allowable if rewritten in corrected form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Claims 1 – 20 recite, inter alia, a method of forming two different types of transistors for a liquid crystal display (LCD), comprising the steps of forming a first polysilicon layer and a second polysilicon layer corresponding to two transistors on the substrate, forming a first gate and a second gate on the gate oxide corresponding to the the two transistors, performing a first doping using a first type dopant to form a first heavily doped region in the first polysilicon layer beside the first gate and performing a second doping using a second type dopant to simultaneously form a second heavily doped region in the second polysilicon layer beside the second gate and form a lightly doped region in parts of the first heavily doped region beside the first gate, wherein the dosage of the second type dopant is smaller than that of the first type dopant. Although,

Yamazaki, US 2002/0028543 and Hwang, US 6,699,738 teach methods of forming two different types of transistors for a liquid crystal display device, they fail to teach the plural doping steps for forming the transistors as disclosed in the present invention.

Additionally, the art of record does not disclose or anticipate the above limitation in combination with other claim elements nor would it be obvious to modify the art of record so as to form a device including the above limitation.

## Conclusion

3. This application is in condition for allowance except for the following formal matters:

Refer to the objections described earlier.

Prosecution on the merits is closed in accordance with the practice under *Ex* parte Quayle, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO**MONTHS from the mailing date of this letter.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Asok K. Sarkar whose telephone number is 571 272 1970. The examiner can normally be reached on Monday - Friday (8 AM- 5 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William B. Baumeister can be reached on 571 272 1722. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/812,961 Page 4

Art Unit: 2891

5. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Asslu Vinna Sarhar Asok K. Sarkar December 9, 2005

**Primary Examiner**